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PATENT ABSTRACTS OF JAPAN

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(54) **IMAGE FORMING DEVICE**

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a transfer-scatter-free, satisfactory image by composing an intermediate transfer belt out of at least two layers, making the outermost layer higher in resistance value than other layers, providing a reinforcement layer on the external surface or/and internal surface of the peripheral edge of one or both ends of the intermediate transfer belt, and making the reinforcement layer equal to or higher in resistance value than the uppermost layer.

SOLUTION: An intermediate transfer belt 20 is composed of at least two layers, and the uppermost layer 22 of the intermediate transfer belt is higher in resistance value than other layers. Also, a reinforcement layer is provided on the external surface or/and internal surface of the peripheral edge of one or both ends of the intermediate transfer belt 20, and the resistance value of the reinforcement layer is made higher than or equal to the resistance value of the uppermost layer 22. Here, it is preferable that the resistance value of the lowermost layer 21 of the intermediate transfer belt 20 be $1 \times 10^8 \Omega$ or below and the resistance value of the reinforcement layer be one hundred or

more times higher than the resistance value of the uppermost layer 22 of the intermediate transfer belt 20. It is desirable to subject the intermediate transfer belt 20 to sizing by a heating process in order to increase accuracy in the length of its perimeter.

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Derwent WPI

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Electrophotographic type multicolor image forming apparatus
has intermediate transfer belt with reinforcement layer of resistance
more than the upper layer

Patent Assignee: CANON KK (CANO)

Number of Countries: 001 Number of Patents: 001

Patent Family:

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Abstract (Basic): JP 2000315020 A

NOVELTY - The image forming apparatus includes an intermediate
transfer belt having upper layer and lower layer. The resistance of
the

lower layer is $1 \times 10^8 \Omega$ and is less than the upper layer. The
reinforcement layer having resistance 100 times or more than the upper
layer, is provided on one side or both sides of the intermediate
transfer belt.

USE - Electrophotographic system.

ADVANTAGE - Favorable image without jump expulsion, transfer
omission is formed. No step out and crack of transfer belt. Since the
belt reinforcement layer is of higher resistance compared to the upper
layer.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic diagram
of transfer belt.

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Title Terms: ELECTROPHOTOGRAPHIC; TYPE; IMAGE; FORMING; APPARATUS;
INTERMEDIATE; TRANSFER; BELT; REINFORCED; LAYER; RESISTANCE; MORE;
UPPER;
LAYER

Derwent Class: P84; S06; T04

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